XXXIV. On some South American Coleoptera of the Family Rutelidæ. By Chas. O. Waterhouse.

# [Read October 5th, 1881.]

The present paper has resulted from examination of some *Rutelidæ* collected by Mr. Buckley in Ecuador. Mr. Buckley brought several new species, and, while describing them, I have added a few which were already in the British Museum.

# ANTICHIRA, Eschsch.

A. All the following species have a very large scutellum; the mandibles with a well-marked notch on the outer edge; a long sternal process; and the larger claw to all the tarsi bifid. Species 1—12.

## 1. Antichira modesta, n. s.

Ovata, olivacea-viridis, nitida, fere lævis; thoracis lateribus subtiliter punctulatis, elytrorum lumeris postice impressis, pygidio striolato. Long. 9 lin.

Very close to A. prasina, Burm., but differs in being a little shorter, of a rather darker green with dark reflections. The punctuation on the forehead, disk of the thorax, and scutellum is only visible with a rather strong magnifying-glass; the punctuation of the elytra is still finer, and can only be traced with difficulty. At the sides of the thorax the punctures are moderately distinct. The elytra have at the side below the shoulder a shallow oblique impression. The pygidium is strongly vermiculose-strigose, as in A. prasina.

Hab. Ecuador, Cuença (Fraser).

# 2. Antichira sobrina, n. s.

Oblonga, subdepressa, nitida, olivacea, ænescens; thoracis lateribus crebre punctulatis, pygidio crebre strigoso, tarsis nigris, gracilibus. Long. 9 lin.

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Allied to A. chrysis, but of quite a different colour. Dark olive-green, tinted with æneous; the colour is so dark that the insect appears black where the light does not shine on it. The punctuation on the forehead, disk of thorax, scutellum, and elytra is moderately close and distinct, but the punctures are as if made with a blunt point. The pygidium is closely and rather finely vermiculose-strigose, the sculpture below the segment much coarser; the penultimate segment of the abdomen below is smooth, the other segments have a line of punctures. The mesosternal process is long and thick, rather enlarged at the apex, and much curved over the anterior coxæ. The sides of the thorax are closely and finely punctured, but not quite so densely as in A. chrysis. The legs are less robust, and the tarsi much more slender; the larger clay of the anterior tarsi is about two-thirds the length of the claw-joint. Male.

Hab. Peru.

In the British Museum collection there is a species from Bolivia which I have no doubt is A. concoloripes, Blanch. A. sobrina is nearer to this than to A. chrysis, on account of the more slender tarsi, but it is of a totally different colour; and the sternal process in the Bolivian insect is more slender and acuminate.

### 3. Antichira læta, n. s.

Oblonga, convexa, nitidissima, æneo-virescens, cupreo fulgida; pygidio subtiliter punctulato, apice strigoso. 3. Long. 11 lin.

Very close to A. lucida, Oliv., and similarly coloured. It is narrower; the clypeus is very thickly and much more distinctly punctured; the punctuation of the thorax and elytra is also more distinct, especially at the apex of the elytra. The pygidium is more conical, very finely, and not very closely, punctured; the apical margin distinctly strigose. The metasternum is smooth, with a few fine punctures at the side. The 2nd to 5th abdominal segments have well-marked oblique ridges, as in A. lucida.

Hab. Bahia.

#### 4. Antichira Olivieri.

Cetonia splendida, Oliv., Ent. i., 6, p. 75, pl. 4, f. 21. C. splendida, Fabr., var., Syst. El. ii., p. 141.

The true *Cetonia splendida*, Fab. (Syst. Ent., p. 47) is of a shining brownish purple with blue reflections, with the sides of thorax and the entire elytra dark yellow. The "*Cetonia splendida*, Fab.," of Olivier is a more ovate species, bright green, with the sides of the thorax and elytra yellow. Fabricius, in his later work, calls it a variety of his species, but as it is quite distinct I propose to call it *Olivieri*.

Burmeister's description of *splendida* is taken from the British Museum specimens; he does not seem to have known Olivier's insect, of which there are now two examples agreeing perfectly with the figure and description.

#### 5. Antichira pantochloris, Blanch.

M. Blanchard (Cat. Mus. Paris, p. 205), compares this to A. splendida, and states that it is broader, and has the thorax broader and entirely green. I think that there can be little doubt that M. Blanchard is speaking of A. splendida, Olivier, and not the Fabrician species, as there is in the British Museum collection a species which differs from A. splendida, Ol., in the way he mentions. If I have rightly identified his species, the character "pygidio fortiter striato" will probably only apply to the female; two male examples, presumably of the same species, have the pygidium punctured, and only strigose on the margins.

#### 6. Antichira læricollis, n.s.

Breviter oblonga, convexa, polita, æneo-cuprea, subtus cuprea; elytris brunneo-flavis, pygidio longe piloso. Long.  $9\frac{1}{2}$  lin.

Very near A. clavata, Fab. in general form and colour, but it is shorter and more convex, and almost entirely without any sculpture whatever on the upper surface; only on the sides of the thorax some delicate punctures may be seen. The pygidium is vermiculose-strigose,

beset with long pale hairs, as also the femora and under side of the insect. Male.

Hab. Minas Geraes, Brazil.

#### 7. Antichira tetradactyla, Linn.

"Ater, lucens, lævis." "Jamaica." Linn., Mant. Plant., p. 530.

Scarabæus tetradactylus, Linn., Mant. Plant., p. 530. S. tetradactylus, Linn., of the Linnean Collection. "S. major, splendens," Sloane, Hist. Jamaica, ii.,

p. 205, pl. 237, f. 2.

Cetonia tetradactyla, Fabr., Syst. El. ii., p. 151. C. tetradactyta, Fabr., of the Banksian Collection. Macraspis melanaria, Blanch, Cat. Mus. Paris, 1850, p. 206.

"M. tristis, Casteln.," Burm., Handb. iv., 1, p. 355.

Burmeister says that he thinks Sloane's insect should be referred to *M. tristis*, but he does not seem to have noticed that Linné himself refers to Sloane's species in

his description of S. tetradactyla.

There can be no doubt that *S. tetradactytus*, L., is *M. tristis*, Burm., but it is possible that *M. tristis*, Casteln. (Hist. Nat. ii., p. 117) may be distinct; there is in the British Museum a specimen named *M. tristis*, Casteln., from Guadeloupe, which differs somewhat from the Jamaica specimens of *M. tetradactyla*, Linn., in having impressed lines on the elytra, and Castelnau's description "élytres avec quelques stries longitudinales, lisses" agrees with this.

#### 8. Antichira aterrima, Dejean, MS.

Under this name there is, in the Museum collection, an example which appears to be distinct from A. tetradactyla, L. It differs in being more clongate and more ovate, and especially in having the thorax regularly narrowed from the base to the front; not in the least angular at the sides.

Hab. Mexico.

## 9. Antichira dichroa, Mann.

Macraspis dichroa, Mann., Nouv. Mém. Mosc. i., p. 50,

pl. 2, f. 4.

M. tetradactyla, Burm. (nec Linn.), Handb., v., 1, p. 354.

Hab. Brazil, Ega, &c.

This common species having always been regarded as M. tetradactyla, L., appears to have no name now available for it but that given to the reddish variety of Mannerheim; and, not being able to refer to the original description, I am obliged to accept this name on the authority of a specimen named by the late Mr. Adam White, and the fact that Burmeister gives M. dichroa as a variety of his M. tetradactyla.

## 10. Antichira cribrata, n. s.

Atra, creberrime evidenter punctata; thoracis lateribus confertim subtilius punctulatis, vel alutaceis. Long. 11 lin.

Very close to A. dichroa, Mann., but rather larger, and more parallel; but it is especially distinct by the sculpture being throughout stronger, and the punctures are more clearly defined and separated. The sternal process is, moreover, much more enlarged at the apex (viewed laterally), and the lower part is more forward than the part next the anterior coxe; in A. dichroa it is truncate, more at a right angle.

Hab. Monte Video; Chili?

## 11. Antichira gagatina, n. s.

Nigra, nitida; thoracis lateribus dense alutaceis, disco, scutello, elytrisque subtilius punctulatis. Long.  $10\frac{1}{2} \, \text{lin.}$ 

Rather narrower and more parallel than A. dichroa. The sculpture of the thorax is similar, but the punctuation of the elytra is much less close, the punctures being very fine, well-defined, and separated. The sternal process is very slender before the much-enlarged apex. The elytra have a very slight eneous tinge in some lights, and the thorax is slightly pitchy.

Hab. Brazil; Rio Grande?

#### 12. Antichira Desmarestii, n. s.

Oblonga, parallela, niger, nitidissima; thoracis angulis anticis sat crebre subtiliter punctulatis, angulis posticis flavis, pygidio subtiliter striolato. Long. 8½ lin.

Very close to A. variabilis, Burm. Burmeister places this species in a different section from his A. trifida; but as both species vary very much in colour, it is extremely difficult to distinguish them, except by the sternal process, which in A. trifida is rather thick, and not very much enlarged at the apex, whilst A. rariabilis has this process slender, more curved, and clavate at the apex. The form which I now propose to call A. Desmarestii is nearest to A. trifida, but has the sternal process more slender and more acuminate at the apex.

One male example has the pygidium margined at the apex with dull yellow; the female has a yellow spot on each side; a female example from New Grenada has the

pygidium black.

Hab. Ecuador (Buckley); New Grenada.

B. Scutellum never more than one-third the length of the elytra, often shorter; the other characters as in Section A. Species 13—17.

#### 13. Antichira polita, n. s.

Oblonga, convexa, nitidissima, viridi-ænea, cuprascens: elytris striis lævissime impressis atque subtilissime punctulatis, scutello parvo. Long. 11 lin.

Closely resembles A. lucens in general form and appearance, and might be mistaken for it, except for the small scutellum, which only measures four millimetres in length. Front of the head and the clypeus closely and rather strongly punctured. Thorax rather strongly rounded at the sides posteriorly, extremely delicately punctured, the punctures a little more close at the sides than on the disk; the base moderately sinuate on each side of the basal lobe, which is quite straight next the scutellum. Elytra to nearly the middle parallel, but then somewhat archately enlarged; smooth (or with only a few extremely delicate punctures) except at the apex, which is strongly punctured. The pygidium is closely vermiculate-striate. Sternal process very elongate-triangular, rather inflated at the apex. The sides of the metasternum strongly vermiculate-striate. Female.

Hab. New Grenada.

#### 14. Antichira generosa, n. s.

Oblonga, convexa, nitida, picea; capite scutelloque cupreis, thorace (basi flexuoso) elytrisque flavis, his striato-punctatis, interstitiis crebre punctulatis, apice rugoso-punctato. Long. 8 lin.

Head very thickly and rather strongly punctured, especially in front, the forehead impressed; clypeus very short, finely rugulose. Thorax yellow, with green tints, 4 mm. long in the middle, broadest at the base, not narrowed till near the middle, thence to the front very obliquely narrowed; finely, very distinctly but irregularly, punctured on the disk, the sides for a considerable space densely punctured; the base flexuous, strongly sinuate on each side of the middle lobe, which is broad and truncate. Scutellum thickly and finely punctured, moderately acute at the apex, 3 mm. long,  $3\frac{1}{4}$  mm. broad at the base. Elytra parallel at the sides, obtusely rounded at the apex, very convex; with lines of rather strong punctures, the interstices thickly and moderately strongly punctured; apical callus very slightly prominent, the apex beyond this closely and strongly punctured: the margin below the shoulders quite simple and not incrassate. Pygidium very densely, transversely rugulose, pilose. Sternal process not very strong, somewhat acuminate.

Hab. Cayenne.

#### 15. Antichira substriata, n. s.

Testacea, ænescens, supra virescens, oblonga, depressa; elytris crebre evidenter punctatis, striatis. Long.  $9\frac{1}{2}$  lin.

Head moderately thickly and finely punctured. Thorax broad and transverse, moderately convex, shining pale green, with yellowish reflections, especially at the sides, finely punctured on the disk, rather strongly and moderately closely at the sides; the anterior angles scarcely

prominent, the sides rather strongly rounded, not angular in the middle; the posterior angles obtuse; the base with the notch on each side of the basal lobe strongly margined, the basal lobe itself arcuately emarginate next the scutellum. Scutellum triangular, green, narrowly tipped with coppery, very delicately punctured, not very acute at the apex, 5 millimetres long. Elytra at the base scarcely as broad as the thorax, rather wider behind, depressed, obscure yellowish, with green reflections, rather strongly and closely punctured, the punctures having a tendency to become confluent transversely; each elytron has four pairs of impressed lines, the third pair rather obscure. The pygidium is very strongly, not very closely, vermiculate-striate, with a round fovea on each side of the base. The sides of the metasternum are very closely (and rather vermiculate) strigose, the sides of the abdomen very finely so. The sternal process is long, gently curved, not very thick, narrow, and not inflated at the apex, the apex itself almost pointed. Female.

Hab. Para.

This species is allied to A. tæniata, Perty, having the base of the thorax similarly constructed, the deep notch on each side of the basal lobe having an acute point next the basal angles of the scutchum. It is much more oblong in form, and quite differently coloured.

### 16. Antichira fulgida, n. s.

Oblongo-ovata, leviter convexa, nitida, viridi-ænea, cupreo et aureo-splendens; elytris striatis, et crebre punctatis. Long. 15 lin.

General build of A. chloroptana, Burm., but with the thorax less narrowed anteriorly. Head and clypeus moderately thickly and distinctly punctured. Thorax very delicately and not very closely punctured, the punctures more distinct at the sides; the base has a rather sudden small sinuosity on each side of the basal lobe (the margin at this sinuosity slightly depressed), the basal lobe gently emarginate. Scutellum broad at the base, distinctly inclined to cordiform, not very acute at the apex, 7 millimetres long, extremely delicately punctured. Elytra very distinctly and rather closely umbilicate-punctate, the punctures confluent at the

apex; each elytron has about seven impressed lines, those towards the sides somewhat obscure. Pygidium vermiculate, rugose at the apex. Sternal process very long, thick, slightly arched, not inflated at the apex. Sides of the metasternum closely vermiculate-striate, the abdomen much more finely so. Female.

Hab. Peru?

All the surface of this insect, besides the punctuation described, is very densely and excessively finely punctured.

#### 17. Antichira sulcipennis, n. s.

Nigra, nitida, lævis; thoracis lateribus angulatis, flavis, scutello parvo, flavo, elytris rufo-flavis, fortiter sulcatis, pygidio fortiter vermiculoso. Long. 11 lin.

A rather short, broad species, not very convex. Clypeus rather narrowed anteriorly, with the front part closely and strongly punctured. Thorax with punctuation, which is only seen with a high magnifying-glass, very strongly angular at the sides rather before the middle, slightly sinuate behind the angulation; the sides vellow, with a large shallow impression, in the middle of which is a pitchy spot; the base only slightly sinuous, straight next the scutellum. Scutellum 21 millimetres long, arcuately narrowed posteriorly. Elytra yellowish red, at the base a little broader than the base of the thorax, a little wider behind the middle; the margins with the basal half impressed above, and very much thickened; each elytron has ten strongly-impressed grooves, none of which (except the sutural one) reach the apex; the 7th, 8th, and 9th are short, terminating below the shoulder; the 10th is marginal, and does not extend much beyond the middle; the interstices are very convex, the alternate ones a little broader than the others. Sternal process long and thick, straight, but curved below, truncate at the apex.

Hab. Ecuador, Chiguinda (Buckley).

C. The two following species have the characters of Section B, but are remarkable for their small size, highly polished surface, rugose pygidium, which, with almost the whole under side of the insect, is clothed with pale fulvous pile. Species 18—19.

#### 18. Antichira pilosula, n. s.

Subrotundata, convexa, nitida, picea; thoracis marginibus lateralibus, corpore subtus pedibusque obscure flavis, pilosis, pygidio rugoso, setuloso. Long. 6 lin.

Front part of the head and the clypeus finely and moderately thickly punctured. Thorax very convex, broadest at the posterior angles, very slightly narrowed to a little in front of the middle, then obliquely narrowed to the front, but yet not very angular at the side; smooth, except a few delicate punctures at the anterior angles; the incrassated lateral margin yellow; the base with a broad arcuate lobe in the middle. Scutellum 2 millimetres long, as broad as long, smooth. Elytra smooth, with some bluntly-impressed lines on the disk; the margin incrassated at the base; with a line of punctures bordering the margin; the apex dull and rugulose. The pygidium coarsely rugose, beset with stiff yellowish hair. The sternal process moderately long and thick, somewhat enlarged and obtuse at the apex. The sterna, margins of the femora, and the sides of the abdomen beset with stiff yellow hair. Male.

Hab. Ecuador, Chiguinda (Buckley).

### 19. Antichira puberula, n. s.

Oblonga, convexa, nitidissima, picea, viridi-micans; thoracis lateribus pedibusque flavis, corpore subtus pygidioque flavo-hirtis, hoc rugoso. Long.  $6\frac{3}{4}$  lin.

Front part of the head and the clypeus closely and very distinctly punctured. Thorax very convex, pitchy brown, reflecting pale green wherever the light falls upon it, moderately thickly and extremely delicately punctured; broadest at the posterior angles, very slightly narrowed to rather in front of the middle, and somewhat obliquely narrowed to the front; the sides, however, very slightly angular; the base with a broad arcuate lobe in the middle. Scutellum 2 millimetres long, and the same width at the base, triangular, but rounded at the apex itself. Elytra very little enlarged posteriorly, subparallel, deflexed at the apex, not very thickly and scarcely visibly punctured even with a glass; the extreme apex rugulose; the apical callosity rather prominent and conical; the margin at the shoulder is thickened, along the rest of the

margin is a row of hair-bearing punctures. Sternal process rather long and thick, concave on its inner side, thickened and truncate at the apex. Female.

Hab. New Grenada.

Besides the difference in colour, this species differs from A. pilosula in being less rotundate, more oblong, in the scutellum being a trifle longer, and in the almost

entire absence of impressed lines on the elytra.

I think *Chlorota rotundata*, Blanch. (Cat. Mus. Paris, p. 208), must closely resemble this species, and, if Prof. Blanchard has overlooked the long sternal process in placing his species in the genus *Chlorota*, mine may be only a variety of his insect.

#### THYRIDIUM, Burm.

The species here described differ from Antichira with small scutellum, in having the mandibles not notched on the outer edge; and differ from Chlorota in having a long sternal process.

## A. Larger claw to all the tarsi bifid. Species 1-5.

### 1. Thyridium Sommeri, n. s.

Obovatum, convexum, nitidum, subtus nigrum; capite, thorace, scutello tibiisque cupreis, elytris flavis, pygidio striolato et femoribus piceis. Mas. Long. 8 lin.

Short, oblong-obovate. Clypeus short, very closely and strongly punctured; head sparingly and finely punctured. Thorax distinctly angular at the sides; sparingly and finely punctured, with a line of rather strong punctures within the incrassated lateral margin; the base slightly oblique on each side, with a slight lobe in the middle, which is very slightly emarginate. Scutellum a curvilinear triangle, rather acute at the apex, nearly 2 millimetres long. Elytra yellow, with the suture tinted with fuscous (but with no sutural stria), convex, a little broader in the middle than at the base and apex, evenly and gently arcuate at the sides. Sternal process moderately long and very thick, gently arched, not distinctly enlarged at the apex. The sterna, femora, and abdomen are sparingly clothed with long pale pubescence.

Hab. Brazil.

The specimen above described is from Dejean's collection, and I have retained his name for it.

#### 2. Thyridium punctatum, n. s.

Oblongo-ovatum, leviter convexum, crebre punctatum; sternis pedibusque cupreis, corpore subtus longe fulvopiloso. Mas. Long. 10 lin.

A very distinct species on account of its strong sculpture; and on account of the deep green colour, which is quite of a different kind from any of the T. psittacina group, approaching more the colour of A. calcarata, but paler, and having pitchy reflections in the shadows. Head rather thickly and very distinctly punctured. Thorax obliquely narrowed anteriorly from rather behind the middle; moderately thickly punctured on the disk, gradually more closely and more strongly punctured towards the side; the base slightly oblique on each side, truncate next the scutellum. Scutellum triangular, with a slight tendency to cordiform, acute at the apex, 3½ millimetres long, closely and obscurely punctured. Elytra thickly and strongly punctured, the punctures towards the sides horseshoe-shaped; each elytron has four impressed lines on the disk, and there is a wellmarked sutural one; the margin below the shoulder is somewhat incrassated. The pygidium is rather coarsely vermiculose. The sternal process is not very long, and is rather slender, not inflated at the apex, but slightly curved over the anterior coxe.

Hab. Venezuela.

#### 3. Thyridium sodale, n.s.

Ovale, convexum, nitidum, prasinum, sat crebre evidenter punctulatum. Mas. Long. 15 lin.

Forehead delicately and rather thickly punctured, the elypeus more strongly punctured. Thorax 7 millimetres long in the middle, very obliquely narrowed anteriorly from rather behind the middle, very delicately and rather thickly punctured, the punctures more distinct towards the sides; the anterior angles very acute and moderately prominent; the sides distinctly angular; the base truncate in the middle next to the scutellum, oblique and very gently bisinuate on each side. Scutellum triangular

(nearly rectilinear), very finely punctured,  $4\frac{1}{2}$  millimetres broad and 5 millimetres long. Elytra very delicately but distinctly and rather closely punctured; the margin is incrassate below the shoulder only. Pygidium closely and rather strongly vermiculate-striolate. The sternal process is long and very thick, obliquely truncate at the apex (viewed laterally), curved on the side next the anterior coxe. The sides of the metasternum and the metathoracic epipleura are rather strongly, moderately closely, vermiculate-striolate. The sides of the abdomen are similarly sculptured, but not quite so strongly so.

Hab. Ecuador (Buckley).

Evidently very near *Chlorota psittacina*, Burm., but the punctuation is quite distinct; and although (by moving the insect about) four lines may be traced on each elytron, these lines are not punctured; the sternal

process is not at all clavate.

Chlorota euchloroides, Murray, is very close to this species, but differs in having the thorax less angular at the sides; the anterior angles are not so prominent nor so acute, and the elytra, besides the ordinary punctuation, has the whole surface closely marked with excessively small punctures, which in some lights look elongate; the tarsi are coppery. The sternal process is very similar, but the angle next the coxe is a little more acute.

### 4. Thyridium scutellatum, n. s.

Ovale, crassum, convexum, viride, subtiliter punctulatum; scutello subcordato. Long. 14 lin.

Allied to Chlorota psittacina, Burm., but very distinct from all the species of this group known to me on account of the form of the scutellum. Punctuation on the front of the head very fine and moderately close, becoming closer and stronger up to the front margin. Thorax 7 millimetres long in the middle, delicately and moderately thickly punctured, the punctures more distinct towards the sides; gradually narrowed anteriorly from very near the base; when viewed from above it does not appear the least angular at the sides, but when seen laterally there is a very obtuse angle; the base in the middle is broadly but very slightly, arcuately emarginate, gently oblique on each side, and gently bisinuate. Scutellum 6 millimetres broad at the base, very gently

sinuate on each side beyond the middle,  $6\frac{1}{4}$  millimetres long, very densely but almost imperceptibly punctured. Elytra densely and excessively finely punctured, the punctures appearing in some lights elongate, and intermixed with this are some rather stronger punctures; on each elytron four obscurely impressed lines may be traced; the margin below the shoulder is slightly incrassate. Pygidium strongly and moderately closely vermiculate-striolate. The sides of the metasternum and the base of its epimera are similarly striolate, but less strongly so; the sides of the abdomen are still less strongly striolate; the apical portion of the epimera is not very thickly punctured. Sternal process very long, gradually narrowing to the apex, slightly curved over the anterior coxe. Body beneath and the femora almost destitute of any pubescence.

Hab. Brazil?

### 5. Thyridium cyanipes, n. s.

Obovatum, convexum, nitidum, viridi-prasinum; thorace angustiori, corpore subtus pedibusque cyaneis. Long.  $11\frac{1}{2}$  lin.

Head sparingly punctured; clypeus coarsely rugulose; its anterior margin only slightly arcuate, the front portion (as well as the mouth and antennæ) nearly black. Thorax 7½ millimetres long, 11½ millimetres broad at the widest part, scarcely narrowed posteriorly, gradually narrowed anteriorly from rather behind the middle; very delicately and moderately thickly punctured; just within the incrassated margin the surface is finely rugulose; the anterior angles rather prominent and acute, the sides (viewed from above) not angular, but arcuate; the base in the middle broadly and very gently and arcuately lobed, with a slight sinusity on each side of the lobe. Scutellum a curvilinear triangle, 3 millimetres long, 4 millimetres broad. Elytra rather thickly and very evidently punctured, the punctures elongate when viewed in certain lights; sutural stria distinct; the margin below the shoulders is slightly incrassate (or perhaps rather turned under). Pygidium smooth in the middle of the base, vermiculate round the margins and sides, which are beset with long pale hairs. Sternal process long and very thick, a little enlarged at the apex, the apical angle bent over the anterior coxæ. Sides of the metasternum and the epipleura strongly and closely vermiculate-striate. Each abdominal segment has at the sides a band of strong hair-bearing punctures.

Hab. Colombia.

B. Claws of the anterior tarsi not bifid, but with a small tooth at the base; the larger claw of the four posterior tarsi bifid.

## 6. Thyridium punctatissimum, n. s.

Obovatum, viridi-olivaceum; elytris creberrime punctatis, pygidio corporeque subtus olivaceis, fulvo-hirtis, pedibus cyaneo-olivaceis, tarsis cyaneis. Long. 12 lin.

Antennæ and parts of the mouth bluish black. Head in parts finely punctured, the front margin of the clypeus rugulose. Thorax 7½ millimetres long, 12 millimetres broad across the middle, rounded anteriorly at the sides, gently sinuate behind the middle; sparingly and delicately punctured, except at the base, where the punctures become more frequent; the surface within the margin is closely (and almost rugulosely) punctured, but not at the hind angles; the incrassated margin is darker olive than the rest of the thorax; the basal lobe is broad and not very prominent, and gently arcuate, with scarcely any sinuosity on each side of it. Scutellum a curvilinear triangle, 4 millimetres broad, 3½ millimetres long. Elytra very thickly punctured, with a mixture of larger and small punctures; there is a distinct sutural stria (the suture nearly smooth), and there are two pairs of impressed lines on each elytron; the margin below the shoulder is slightly incrassate. Pygidium moderately strongly vermiculate-striolate. Sternal process rather strong, moderately inflated and obtusely rounded at the apex. Sides of the metasternum and epipleura densely vermiculate-striolate, the areas thus formed very small, and each having in the centre a small puncture. Sides of the abdomen rather strongly punctured.

Hab. Venezuela.

C. Larger claw of the anterior tarsi bifid; all the claws of the four posterior tarsi simple.

#### 7. Thyridium lineatum, Murray.

This species is described by Mr. Murray (Edinb. New Phil. Journ. v., 1857, p. 225) under the genus *Chlorota*, but it appears to me to be better to confine that genus to those species which have only a very short sternal process.

D. The following species has all the claws simple, but the outer anterior claw is more dilated at the base.

#### 8. Thyridium punctiventre, n. s.

Viridi-olivaceum, lucens, oblongum, depressum; thorace antice angustato, lateribus flavis, elytris crebre punctatis ad apicem rugulosis, corpore subtus pygidioque albosetosis. Long.  $8\frac{1}{2}$  lin.

Front part of the head sparingly punctured; the clypeus gradually more thickly punctured to the front margin, where it is rugulose, tinted with yellowish. Thorax convex,  $5\frac{1}{2}$  millimetres long in the middle, broadest at the posterior angles, gradually narrowed to rather in front of the middle, and then more obliquely narrowed to the anterior angles, which are rather prominent and acute; surface sparingly and most delicately punctured, more closely, but very obscurely, punctured towards the sides; the base is broadly but very slightly lobed in the middle, nearly straight on each side. Scutellum a curvilinear triangle, 2 millimetres long and 2 millimetres Elytra rather depressed, broadest about the middle, very obtuse at the apex, rather strongly and moderately thickly punctured, the punctures of unequal size, the apical margins rugulose, margin a little incrassate below the shoulder, and with an impressed line above the margin; subapical callosity obtuse, but very distinct. Pygidium coarsely rugose, and beset with long stiff hairs. Sternal process moderately long and thick, not inflated at the apex, but (viewed laterally) the point next the anterior coxe is produced over the coxe, as is common in many of the species. Metasternum strongly punctured (except in the middle), and at the sides rugulose, as well as the episterna; pilose. Legs yellowish green. Abdomen with a line of strong elongate punctures all across each segment, each puncture with a short stiff whitish hair.

Hab. Ecuador, Chiguinda (Buckley).

### CHLOROTA, Burm.

#### 1. Chlorota ærea, n. s.

Ovata, convexa, subnitida, crebre punctulata, ærea; elytrorum marginibus parcius punctatis, apice confertim punctato. Long. 9 lin.

Of a brownish bronze, with more brassy tints in some lights. Head thickly punctured, rather coarsely so in the middle of the front part; the clypeus densely punctured, more rugulose at the margins. Thorax  $5\frac{3}{4}$  millimetres long, broadest at the base, very slightly narrowed to a little in front of the middle, and then obliquely narrowed to the front, thickly and finely punctured on the disk, the punctuation quickly becoming closer towards the sides, where it is very dense, rendering the surface somewhat dull; the shining incrassated margin is very narrow in front, gradually wider posteriorly, the shining surface continued a little way along the posterior margin; the base somewhat straight on each side, but broadly arcuately lobed in the middle. Scutellum 2½ millimetres long, 3 millimetres broad, a curvilinear triangle, but with the slightest tendency to be cordiform. Elytra broadest in the middle, obtuse at the apex, finely and very densely punctured, the apex finely rugulose; the margin below the shoulder is incrassate and smooth (the margin somewhat turned under); on the side there is a very obtuse ridge, terminating before the apical callus, the surface below this somewhat shining, but finely punctured; suture slightly impressed, with no distinct sutural stria, but there is a fine line extending from the humeral callus to the apical one. Pygidium vermiculate-rugulose. Sternal process not very long, comparatively slender, and somewhat acuminate. All the under side of the insect (except the middle of the sterna) and the four posterior femora rugose (the abdomen more finely so than the rest), and beset with yellowish hairs.

Hab. Ecuador (Buckley).

## 2. Chlorota vitrina, n. s.

Oblonga, nitidissima, æneo-lucens, mutabilis; elytris apice subtiliter ruguloso. Long.  $11\frac{1}{2}$  lin.

A rather long-oblong species, with straight sides, narrower in front than behind, broadest just before the apex

of the elytra; very highly polished, aneous where the light falls upon the surface, but almost black in the shade, with purple-coppery tints slightly visible in certain lights. Front of the head and the clypeus finely and closely rugulose; the clypeus rather acuminate and notched at the slightly reflexed apex. Thorax convex, moderately thickly but extremely delicately punctured, except within the incrassated margin, where it is closely rugulose, straight at the sides to rather in front of the middle, then obliquely narrowed to the front. Elytra impressed at the sides below the shoulders; at first sight appearing without punctuation, but on close examination some extremely fine punctures may be seen; the margin below the shoulder is incrassate, and there is a finely rugulose space above the margin; all the apex below the callus is densely and finely rugulose, the rugulose surface continued (gradually becoming narrower) round the side to about the middle, leaving the extreme margin at the side smoother. The sternal process is very short and small, the apex turned away from the coxe. Body beneath hairy. Pygidium densely rugulose, more finely so at the base than at the apex, beset with vellowish hair. The larger claw to all the tarsi bifid.

Hab. Ecuador, Chiguinda (Buckley).

### 3. Chlorota bidentata, n. s.

Oblonga, antice paulo angustata, eneo-lucens, mutabilis, nitidissima; elytrorum marginibus apiceque subtiliter rugulosis. Long. 9 lin.

Closely allied to C. vitrina, but shorter, less straight at the sides of the elytra. The clypeus is a little less narrowed in front, and less acutely bidentate at the apex. The rugulose space within the lateral margin of the thorax is a little wider ( $\frac{3}{4}$  mm. wide). The very finely rugulose surface of the apex (which is tinted with brown) is more extended, and is continued like a broad band all round the sides to the shoulder, leaving the incrassated margin below the shoulder, and a very short ridge on the side about the middle, smooth. The apex of the sternal process is turned up, i. e., away from the anterior coxe, as in C. vitrina.

Hab. New Grenad

#### 4. Chlorota associata, n. s.

Late ovalis, convexa, nigro-cyanea, nitens, subtus olivacea; elytris sulcatis, interstitio primo fortiter punctato. Long. 12 lin.

Head sparingly and delicately punctured; clypeus rugulose, parabolic in outline. Thorax 7 millimetres long, 13 millimetres broad, very convex, moderately thickly and extremely finely and delicately punctured, broadest at the posterior angles, scarcely narrowed to about the middle, then very obliquely narrowed to the front: the sides near the incrassated margin closely and coarsely punctured; the base slightly oblique on each side, straight (or only in the slightest degree emarginate) in the middle next the scutellum. Scutellum 5 millimetres long, and equally broad at the base, triangular, blunt at the apex, very delicately punctured. Elytra each with eight or nine very strongly obtusely impressed punctured lines (besides the sutural stria), the first broad interstice very strongly punctured, the 3rd to 7th interstices convex (especially the alternate ones), the 7th only convex posteriorly; the apex with some strong punctures; apical callus not distinct. Pygidium moderately closely vermiculate-striate. Sternal process very short and obtuse. Body below clothed with dark brown pubescence. Outer claw of the anterior tarsi with a sharp slender hook near the base; the other claws simple.

Hab. Ecuador, Chiguinda (Buckley).